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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,942	10/14/2003	Jeff A. Krolik	1001.1503102	3699

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CROMPTON, SEAGER & TUFTE, LLC
1221 NICOLLET AVENUE
SUITE 800
MINNEAPOLIS, MN 55403-2420

EXAMINER	
HOUSTON, ELIZABETH	
ART UNIT	PAPER NUMBER
3731	

MAIL DATE	DELIVERY MODE
07/14/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/684,942	KROLIK ET AL.	
	Examiner	Art Unit	
	ELIZABETH HOUSTON	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *31-37,39,43-48 and 51-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *31-37, 39, 43-48, 51-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 31, 32, 35-36 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene et al. (USPN 6,485,501) in view of Bagaoisan et al. (USPN 6,152,909).

3. Greene discloses an apparatus for use in retrieving a vascular filter disposed on a guidewire from a vessel (see figures 28-31), the apparatus comprising: a retrieval adapter (392, 380, 397) having a proximal end, a distal end and a lumen, the distal end of the retrieval adapter being configured to radially expand and receive at least a portion of the vascular filter within the lumen during retrieval of the vascular filter from the vessel (it is inherent that the distal end will have to undergo some expansion in order to fit over and hook onto the proximal end of the filter, for example at 372 in Fig. 28); wherein the proximal end of the retrieval adapter is configured to engage and be coupled to a distal end of an interventional device within the vessel (Figs 30 and 31 both show that the retrieval adaptor is engaged with a distal end of an interventional device); and wherein, when in a non-expanded configuration, at least a portion of the distal end of the retrieval adaptor is tapered and has an inward bend opening (Note all

embodiments in Figs. 28-30 show a distal end that tapers inward thus resulting in an inward bend). It is inherent, if not then obvious, that the device would be made of biocompatible material in order for it to be delivered to the body without causing contraindications within the body.

4. Greene does not disclose that the retrieval adaptor includes an opening oblique to the longitudinal axis.

5. Bagaoisan discloses a catheter that is used in the removal of material from a lumen. The distal tip can be perpendicular to the longitudinal axis or oblique to the longitudinal axis (see figs. 8a, 8b and 8c). Bagaoisan teaches that the angled tip maximizes the area opening for ease of retrieval (Col 12, lines 1-10).

6. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the angled tip as disclosed by Bagaosian to enhance the retrieval catheter of Greene in order to provide a wider opening for more easily receiving the filter device without increasing the overall diameter of the retrieval device. The manner of enhancing a particular device was made part of the ordinary capabilities of one skilled in the art based upon the teaching of such a technique by Bagaoisan. Accordingly, one of ordinary skill in the art would have been capable of applying this known technique of an oblique opening in the same manner to the prior art filter retrieval of Greene and the results would have been predictable, namely, one skilled in the art would have readily recognized that an oblique opening in a filter retrieval device would positively result in a more effective retrieval device with a streamlined profile for use in narrow vessels.

7. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene in view of Bagaosian et al. as applied to claim 31 above and further in view of Ferrera (USPN 6,240,231).

8. Greene in view of Bagaoisan discloses the invention substantially as claimed as stated above except for the radiopaque coil.

9. Ferrera teaches that it is old and well known in medical devices to combine the use of a radiopaque marker that is a reinforcing coil (138, abstract).

10. It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a radiopaque marker that is a reinforcing coil into the filter retrieval device since it is an old and well-known technique in the medical field. Radiopaque markers provide the advantage of enhancing visibility and of the device during delivery. Reinforcing coils provide the advantage of increasing trackability across tortuous vessels and providing additional support. Incorporating these two features into the filter retrieval device would allow the user to track the location of the retrieval device relative to the filter while also providing additional support at the location where the retrieval device will have to carry the weight of the filter and any debris that is being removed. The manner of enhancing a particular device was made part of the ordinary capabilities of one skilled in the art based upon the teaching of such a technique by Ferrera. Accordingly, one of ordinary skill in the art would have been capable of applying this known technique of a radiopaque coil in the same manner to the prior art filter retrieval of Greene modified by Bagaoisan and the results would have been predictable, namely, one skilled in the art would have readily recognized that

radiopaque coil in a filter retrieval device would positively result in a more effective retrieval device with increased trackability and visibility.

11. Claims 37, 43, 44, 47, 48, 51, 52, 55 rejected under 35 U.S.C. 103(a) as being unpatentable over Greene et al. (USPN 6,485,501) in view of Bagaoisan et al. (USPN 6,152,909) as applied to claim 31 above and further in view of Ha (USPN 6,159,195).

12. Greene modified by Bagaoisan discloses all the elements substantially as claimed as stated above including that the proximal end of the retrieval adapter is tapered to facilitate engagement with a distal end of the interventional device (see Figs 30 and 31). Greene modified by Bagaoisan does not disclose that the distal end of the retrieval adapter has a plurality of expansion slits.

13. Ha discloses an exchange catheter that incorporates the use of slits to accommodate the delivery of an occlusive device while still maintaining a low profile (214; abstract; C 8: L 48-55; C 11: L 55-64). The slits divide the distal portion into a plurality of curved portions since the end of the catheter is round.

It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate expansion slits into the retrieval device of Greene modified by Bagaoisan since the manner of enhancing a particular device was made part of the ordinary capabilities of one skilled in the art based upon the teaching of such improvements by Ha. Accordingly, one of ordinary skill in the art would have been capable of applying the known technique of expansion slits in the same manner to the

prior art of the filter retrieval device of Greene modified by Bagaoisan and the results would have been predictable to one of ordinary skill in the art, namely, one skilled in the art would have readily recognized that expansion slits in filter retrieval device would positively result in a device that can readily accommodate the retrieval of a filter while maintaining a low profile.

14. Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greene in view of Bagaoisan et al. in view of Ha as applied to claims 43 and 51 above and further in view of Ferrera (USPN 6,240,231).

15. Greene modified by Bagaoisan and Ha disclose the invention substantially as claimed as stated above except for the radiopaque coil.

16. Ferrera teaches that it is old and well known in medical devices to combine the use of a radiopaque marker with a reinforcing coil (138, abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a radiopaque marker that is a reinforcing coil into the filter retrieval device for the reasons stated above regarding claims 33 and 34.

Response to Arguments

17. Applicant's arguments, see Remarks, filed 03/31/08, with respect to the Grayhack reference lacking a filter retrieval device having a proximal end tapered for engagement with an interventional device have been fully considered and are persuasive. The rejection of 01/10/08 under 35 USC 102(b) has been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH HOUSTON whose telephone number is (571)272-7134. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on 571-272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. H./
Examiner, Art Unit 3731

/Todd E Manahan/
Supervisory Patent Examiner, Art Unit 3731